The blister beetle Mylabris pustulata Thunb. is very common in south India and is a pest on numerous crops and other plant species. This beetle feeds on the flowers and tender shoots of many plants such as cotton, gogu, red gram, groundnut, cowpea, lab-lab, cucurbitaceae, prickly pear, garden species of Hibiscus, rose plants and the fruits of Artocarpus species. (SOME SOUTH INDIAN INSECTS AND OTHER ANIMALS OF IMPORTANCE, Fletcher, T.B. 1914, MANUAL OF FOREST ZOOLOGY FOR INDIA, Stebbing, E.P. 1977).

While studying plant-animal interactions at

the Pt. Calimere Wildlife Sanctuary, Tamil Nadu, I observed this beetle feeding on flowers and fruits of the plants listed in Table 1. However, they were more frequently noted on the flowers of Canavalia ensiformis and Opuntia dillenni, which indicates that the beetle is a serious pest on these two species of plants.

My sincere thanks are due to Prof. P.V. Bole, President, BNHS, for encouragement.

December 3, 1991 P. BALASUBRAMANIAN

## 30. NEW DISTRIBUTIONAL RECORD FOR INDIALONA GANAPATI PETKOVSKI (CRUSTACEA : CLADOCERA) FROM UJANI WETLAND, MAHARASHTRA, WITH FIRST DESCRIPTION OF MALE AND REPRODUCTIVE FEMALE (With ten text-figures)

Indialona ganapati was originally described by Petkovski (1966) on the basis of parthenogenetic females from Ahmedabad, but he did not give sufficient characters for its diagnosis. Smirnov (1971) redefined the genus Indialona on the basis of literature and added a few more species from other genera like Alona globulosa Daday, A. macronyx Daday and Euryalona annandalei Daday in this genus by using characters such as the high body and a single head pore.

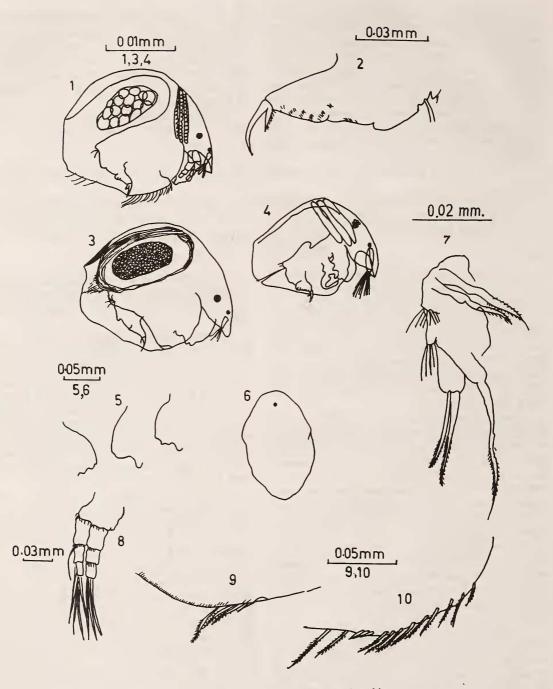
Later, Rajapaksa and Fernando (1987) revised the genus using fresh material collected from all over the world. They have completely changed the status of the genus by retailing only I. ganapati in this genus. I. globulosa was transferred to a new genus Notoalona; I. macronyx was reassigned to genus Alona, while E. annandalei was kept due to non-availability of material for study. E. annandalei was originally described from eastern Tibet. Though Rajapaksa and Fernando (1987) and later on Michael and Sharma (1988) have made some observations on I. ganapati from material collected from Bhopal lake, Madhya Pradesh, they have only used parthenogenetic females for their studies and redescription.

While studying the Cladocera collected from Ujani wetland, Pune district of Maharashtra, I came across a few males, reproductive females and several parthenogenetic females, which are described in this note with detailed diagnostic characters. The description of this species has great significance because this genus of Cladocera is found only in India, with the above mentioned sole species. This is only the third record of the species in India, the first being from Ahmedabad (Gujarat, type locality) and the second from Bhopal (Madhya Pradesh).

Parthenogenetic female: Length 0.27-0.29 mm. Body nearly circular. Head shield with rounded anterior and posterior margin, with one head pore. Mandibles short and thick, situated between the head shield valves. Posterior margin of valve about half the maximum height. Posterodorsal angle distinct, slightly protruded. Posteroventral corner rounded, without spinules. Valve with sparse setae on the ventral margin. Rostrum blunt. A single head pore situated slightly farther from eye than is the eye from ocellus.

Antennules almost reaching apex of the rostrum. Aesthetases almost uniform in length, slightly longer than the length of rostrum. Setae on antenna : 0-0-3/1-1-3; segments as long as labrum. Seta on proximal segment small, reaching apex of third segment. Preanal and postanal parts of postabdomen are of almost equal size. Ocellus smaller than eye, situated halfway between eye and apex of rostrum. Labral plate rounded, with a notch at the apex. Ventral bulge of valve with a few grouped setae, and setae posterior to it arise from small protuberances. Two very large ejector hooks on first leg. Legs IV and V smaller than the preceding legs. Shape and armature of the postabdomen is typical of this genus. Length-height ratio of body 10:7.5.

Reproductive female: Sometimes called Ephippial female. Length 0.27-0.29 mm. Body oval



Figs. 1-10. Indialona ganapati Petkovski

Parthenogenetic female, 2. Postabdomen of parthenogenetic female, 3. Ephippial female with ephippium,
Male with hook on first leg, 5. Different shapes of labrum, 6. Head shield, 7. First leg of female, 8. Antenna
9. & 10. Ventral marginal setae on valve.

with anterior and posterior corners evenly rounded. Dorso-posterior half heavily chitinized. Height relatively larger than in parthenogenetic female. Carapace around the resting egg heavily pigmented. Ephippium with a single egg.

**Male:** Length 0.24-0.25 mm. Height rather narrower than in the females (mentioned above). Length-height ratio 10 : 6. Males are characterised by their cigar-shaped antennules which have equal width throughout their length. First leg with a pair of strong copulatory hooks, with a knob-like structure at their bases. Postabdomen broad but smaller in size than in females. Basal spines large, more than half the length of terminal claw. Terminal claw similar but much shorter than that of female.

I thank the Director, Zoological Survey of India, Calcutta for approval of the project, and Dr G.M. Yazdani, Scientist and Officer-in-Charge of this Station, for providing necessary facilities.

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PRAMOD D. RANE

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## 31. BOSMINOPSIS DEITERSI RICHARD, 1895 — A NEW RECORD FOR WEST BENGAL (CRUSTACEA : CLADOCERA) (With three text-figures)

During the course of a survey in 1991-92, we came across hundreds of specimens of a cladoceran, *Bosminopsis deitersi* Richard in the river Ganga at Barrackpur, West Bengal (22° N, 88° E). Literature on the cladoceran fauna of West Bengal is scanty. Except for Sharma's (1978) report on the occurrence of about 28 species, there is no other elaborate study for this region. The present study reports the occurrence of *B. deitersi* for the first time.

> Family: Bosminidae Sars, 1865 Genus: Bosminopsis Richard, 1895

## Bosminopsis deitersi Richard 1895 (Figs. 1-3)

Female: Body oval, maximum height near posterior end of the body. Postero-dorsal corner of valves distinct: postero-ventral corner with a small process and with 1-2 spinules before it (Fig. 1). Head rounded with a projection just near the eye, rostrum long with two lateral branches near the apex and a long olfactory seta. Eye large, just touching the anterior margin. Valves with faint polygonal reticulation, ventral margin rounded, slightly serrated and with a long and pointed marginal spine. Post-abdomen small and tapering distally, lateral side with two groups of slightly large denticles followed by groups of fine spinules (Fig. 2). Claw serrated and concave with a bipasal spine. Head shield ornamented with longitudinal and polygonal reticulations (Fig. 3).

Distribution: INDIA: Yamuna river, Delhi (Brehm 1963), Ghana Canal, Keoladeo National Park, Rajasthan (Venkataraman 1987), Irinjalakuda, Kerala (Michael and Sharma 1988), Malaysia (Idris 1983) and China (Seich-chih and Nan-Shan 1979).

Venkataraman (1987) discussed the validity of a new species, *B. devendarai*, described by Rane (1984) from a tank near Jabalpur, Madhya Pradesh, resembling *B. deitersi*. The present study also agrees well with the data given by Venkataraman (1987). The specimens examined by us match the description given by Idris (1983) and Michael and Sharma (1988).

We are grateful to the Director, ZSI, Calcutta for facilities provided to conduct this study.

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